

Case 3132***Eudorylas* Aczél, 1940 (Insecta, Diptera): proposed conservation of usage by the designation of *Pipunculus fuscipes* Zetterstedt, 1844 as the type species**

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Abstract. The purpose of this application is to conserve the use of the name *Eudorylas* Aczél, 1940 for a large and cosmopolitan genus of pipunculid flies, parasites of Homoptera, by designating *Pipunculus fuscipes* Zetterstedt, 1844 as the type species. The originally designated type species is *Cephalops opacus* Fallén, 1816, but this was based on an error. *C. opacus* does not correspond to the original and subsequent usage of *Eudorylas* but is included in *Microcephalops* De Meyer, 1989. *Neodorylas* Kuznetsov, 1995 was proposed as a substitute name for *Eudorylas* auct., but it has not been adopted and if it were there would be considerable confusion, since the name *Eudorylas* would be transferred to the species placed in *Microcephalops*. The present proposals conserve the usage of both *Eudorylas* and *Microcephalops*; *Neodorylas* will become a junior objective synonym of *Eudorylas*.

Keywords. Nomenclature; taxonomy; Diptera; PIPUNCULIDAE; *Eudorylas*; *Eudorylas fuscipes*; *Microcephalops*; *Microcephalops opacus*; *Neodorylas*.

1. Fallén (1816, p. 15) described the pipunculid fly *Cephalops opacus* based on male and female specimens from Ostrogothia, Sweden, apparently collected by Zetterstedt ('Habitat in Ostrogothia. D. Zetterstedt.').

2. Subsequent authors (e.g. Becker, 1897, p. 35; Sack, 1935, p. 26) placed *C. opacus* in a species-group of *Pipunculus* Latreille, 1802 recognised by a coloured pterostigma, dull pollinosity of abdomen, and usually an acuminate third antennal segment.

3. Aczél (1940, p. 151) established (in a key) the generic name *Eudorylas* for this species-group of *Pipunculus*. The genus keys out with the following characters [in translation]: 'Propleuron naked, without hairs or bristles. Anal vein present and well developed up to, or almost up to, the hind wing margin. Pterostigma present. Medial vein without furcation and without appendix. Third antennal segment larger than second segment, usually acuminate'. The absence of a propleural fan is considered a

diagnostic character, but this was not noticed by previous entomologists studying the group. Aczél (1940) designated *Cephalops opacus* Fallén, 1816 as the type species of *Eudorylas*, but in doing so he merely selected the included nominal species with the oldest available name and did not examine any type specimens of it.

4. Subsequently Aczél (1948, p. 77) wrote [in translation]: 'Specimens of 31 species with dull abdomen and coloured pterostigma, which were placed in Becker's and Cresson's Group I [of *Pipunculus*] and in Sack's Group IV, have propleura without a fan. It is therefore most likely that all species with dull abdomen and coloured pterostigma of the genus *Dorilas* Meig. s. lat., which I could not study, also belong here. These species are indicated as '*Eudor.*?' in the Index'. Although in the Index (p. 164) *C. opacus* was not given with a question mark it was recorded as '*Eudor.*?' on p. 15 of the text, confirming that Aczél had not studied specimens of this species and that in 1948 he was not sure that it really belonged to *Eudorylas*.

5. Collin (1956) studied Fallén's collection in Stockholm as well as Zetterstedt's in Lund. No specimens (only two empty pins) remain under *C. opacus* in Fallén's collection (Collin, 1956, p. 149). In Zetterstedt's collection two specimens, a male and a female, are labelled as *Pipunculus opacus*, and Collin (1956, p. 151) designated the male specimen (no. 193; type number ZML 2449:1 assigned by R. Danielsson) as the lectotype of *Cephalops opacus* Fallén, 1816.

6. The genus *Eudorylas* as described by Aczél (1940, 1948) has been in common use, and 411 species are currently placed in it (see De Meyer, 1996, 1997; Dempewolf, 1996; Dempewolf & von der Dunk, 1996; Rafael, 1996; Rafael & Ale-Rocha, 1997).

7. Kuznetsov (1995) studied the lectotype of *C. opacus* in Lund and concluded that it is conspecific with *Pipunculus vestitus* Becker, 1900 (p. 230), of which he studied some of the syntypes. *P. vestitus* is a species included in *Microcephalops* De Meyer, 1989 (p. 120), which has *P. banksi* Aczél, 1940 (p. 152) as its type species. *Microcephalops* is differentiated from *Eudorylas* by the propleural fan being present but reduced, the frons broadened and face narrowed, and the third antennal segment being rounded or short acute and only slightly larger than the second segment. In the phylogeny proposed by Rafael & De Meyer (1992) *Microcephalops* and *Collinias* Aczél, 1940 are considered to form a monophyletic group which is distinct from *Eudorylas*. Based on the synonymy of *Cephalops opacus* and *P. vestitus*, Kuznetsov (1995) synonymised *Eudorylas* and *Microcephalops*, treating the former as the valid name. He (Kuznetsov, 1995, p. 326) established the new genus *Neodorylas* to accommodate all the species previously placed in the traditional genus concept of *Eudorylas*, and designated *Pipunculus fuscipes* Zetterstedt, 1844 as the type species. He proposed new generic combinations (with *Neodorylas*) for all 397 species previously placed in *Eudorylas* and (with *Eudorylas*) for the 28 species placed in *Microcephalops*.

8. A restudy of the lectotype of *C. opacus* and syntypes of *P. vestitus* confirms that the names are synonymous, and there can be no doubt that the species concept proposed by Fallén (1816) for *C. opacus* conforms to the lectotype. Although the original description is brief, it states (Fallén, 1816, p. 15) '... at nervus quartus juxta nervum transversum ordinarium haud ita inflectitur, nullum formans angulum'. Freely translated, this means that the fourth longitudinal vein [M1+2] is not curved where it coincides with the marginal cross-vein. This character is seen in the lectotype

of *C. opacus* and in all *Microcephalops* species (cf. illustration 26 in De Meyer, 1989). All other generic characters for *Microcephalops*, including the presence of the reduced propleural fan, are similarly present in the lectotype of *C. opacus*.

9. A review of the recent literature (i.e. after 1995) shows that the proposal of Kuznetsov (1995) has not been adopted by other authors. No reference could be found where the name *Neodorylas* was used. All recent works still use the generic name *Eudorylas* in the sense originally described by Aczél (e.g. Bankowska, 1996, 1997; Dempewolf, 1996, 1998; Dempewolf & von der Dunk, 1996; Rafael, 1996; De Meyer, 1997; Guglielmino & Virla, 1997; Kozánek & Belcari, 1997; Lauterer, 1997; Rafael & Ale-Rocha, 1997; Skevington & Marshall, 1997; von der Dunk, 1997; Dempewolf & Sander, 1999).

10. Von der Dunk & Lauterer (1998, p. 169) considered *C. opacus* and *P. vestitus* to be identical, although they did not examine type material, and placed *C. opacus* in a new combination as *Microcephalops opacus* (Fallén, 1816). However, they did not synonymise the genera *Eudorylas* and *Microcephalops*, and it is evident that they were not aware that *C. opacus* is the type species of *Eudorylas* by original designation.

11. From the above it is clear that Aczél's (1940) designation of *C. opacus* Fallén, 1816 as type species for his genus *Eudorylas* was erroneous, since in doing so he designated a nominal species that does not possess the characters assigned to the generic concept (i.e. the type species was based on a misidentification, or at least in ignorance of its characteristics). Under Article 70b of the 1985 edition of the Code, Kuznetsov (1995) should not have erected the new genus *Neodorylas* to accommodate all species previously placed under *Eudorylas* but should have maintained existing usage and referred the case to the Commission; his action upset the well established usage of the generic name *Eudorylas*.

12. We propose that *Pipunculus fuscipes* Zetterstedt, 1844 (p. 953) should be designated as the type species of *Eudorylas* Aczél, 1940. We have studied the male lectotype designated by Collin (1956, p. 151) in Zetterstedt's collection in Lund (no. 296, type number ZML 2442:1 allocated by R. Danielsson) and found it to conform to the generally accepted concept of *Eudorylas*; from Aczél (1948) it is apparent that *P. fuscipes* is one of the originally included species that he had actually studied. This type species designation would conserve the original and modern usage of the generic name *Eudorylas*, would conserve the name *Microcephalops*, and would render *Neodorylas* Kuznetsov, 1995 a junior objective synonym of *Eudorylas*. The valid name of *Cephalops opacus* Fallén, 1816 would be *Microcephalops opacus*, as used by von der Dunk & Lauterer (1998; see para. 10 above).

13. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Eudorylas* Aczél, 1940 and to designate *Pipunculus fuscipes* Zetterstedt, 1844 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Eudorylas* Aczél, 1940 (gender: masculine), type species by designation in (1) above *Pipunculus fuscipes* Zetterstedt, 1844;
- (3) to place on the Official List of Specific Names in Zoology the name *fuscipes* Zetterstedt, 1844, as published in the binomen *Pipunculus fuscipes* (specific name of the type species of *Eudorylas* Aczél, 1940);

- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Neodorylas* Kuznetzov, 1995 (a junior objective synonym of *Eudorylas* Aczél, 1940).

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